VACCINE HESITANCY WHAT'S A PROVIDER TO DO?

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Disclosure

- I have no relevant financial relationships with the manufacturers of any commercial products and/or provider of commercial services discussed in this CME activity
- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

OBJECTIVES

- Understand the importance of vaccine
- Understand the underlying causes of parents refusing vaccines for their children
- Become knowledgeable of the best approaches to discuss immunization concerns with parents

IMPACT OF VACCINES

- One of 10 most important Public Health initiatives in history
- 3 million deaths/year in children prevented
- Saves countless money by preventing medical complications, loss of income

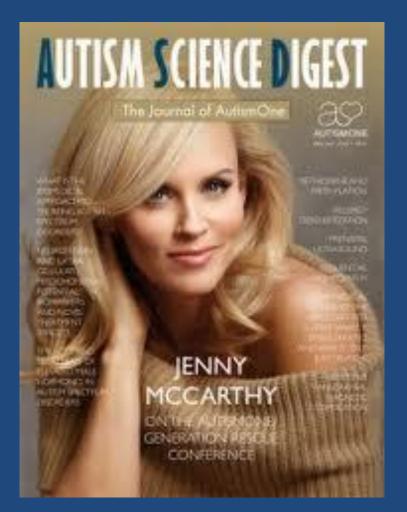
IMPACT OF VACCINES

- Routine Immunizations 2009 cohort
- Prevents
 - 42,000 early deaths
 - 20 million cases of disease
- Saves
 - \$13.5 billion direct costs
 - \$68.8 billion societal costs

IMPACT OF VACCINES

DISEASE	20 TH CENTURY ANNUAL MORBIDITY	2010 REPORTED CASES	% DECREASE
DIPTHERIA	21,053	0	100
PERTUSSIS	200,752	21,291	89
TETANUS	580	8	99
POLIO	16,316	0	100
MEASLES	530,217	61	>99
MUMPS	162,344	2,528	98
RUBELLA	47,745	6	>99
CRS	152	0	100
HFLU	20,000 (EST)	270	99
SMALL POX	29,005	0	100





HOW BIG IS THE PROBLEM?

- Diekama 2005 (AAP Surveys)
 - 7/10 pediatricians experienced refusal on an immunization in the last 12 months
 - MMR #1 refused vaccine
 - 4% pediatricians reported refusing an immunization for their own children

HOW BIG IS THE PROBLEM?

- National Immunization Survey 2003-2004
 - 6% parents have refused a vaccine
 - 85% pediatricians have had a parent refuse all or some vaccines in the last 12 months
 - 13% parents delayed a vaccine
- National Immunization Survey 2010
 - 1% refuse ALL vaccines

HOW BIG IS THE PROBLEM?

- Kansas AAP Immunization Survey 2012
 - 88% members have had parent refuse a vaccine
 - 96% members have had a parent ask to delay or alter vaccine schedule
 - 64% members have 1-5% parents refuse all vaccines

HESITANCY vs. REFUSAL

- Acceptance group
 - **-** 70%
 - Interested in vaccine information
 - High trust level
- Hesitant group
 - -30%
 - Interested in vaccine information
 - Want to trust
- Anti-vaccine group
 - **–** 1%
 - NO Interest in vaccine information
 - NO trust

SOURCE: OPEL 2012

DEMOGRAPHICS

- White
- Female
- 30 years of age or older
- More than 1 child
- Higher income
- More educated



SOURCE: OPEL 2012

PARENTAL CONCERNS

Too Many36%

Autism 30%

• Fevers 30%

Unsafe ingredients 25%

Not tested enough 15%

Causes the disease 15%

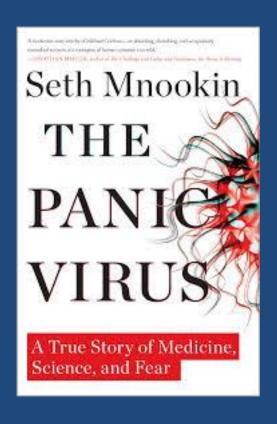
PARENTAL CONCERNS

- Gellin 2000
 - Too many vaccines
 - Vaccines may weaken the immune system
- National Immunization Survey 2009
 - Worried about safety
 - Serious side effects
 - Too many vaccines overwhelm the immune system

PARENTAL CONCERNS

- KAAP Immunization Survey
- Top Parental concerns
 - Serious side effects
 - Too many shots
 - Autism
 - Lack trust in Public Health/Government

COMMON DENOMINATOR





FEAR

- Consumerism
- Vaccine success
- Lack of trust in public health/ government
- Lack of trust in science
- Alternative medicine
- Media
- Misinformation

WHO CAN BE CONVINCED?

- Halperin- 5 groups vaccine hesitant parents
 - Uninformed but correctable
 - Misinformed but correctable
 - Well read and open minded
 - Content and Convinced
 - Committed and missionary

WHAT CHANGES PARENTS MINDS?

- Health Care Provider
 - Most important Source
- More information
 - Handouts
 - Web site
 - IOM Report questions effectiveness of these
- "Firing" patients

SOURCE: OPEL 2012

MESSAGING

Message

- Evidence from CDC on MMR and Autism
- Text information from VIS
- Images of children with diseases
- Dramatic narrative from fact sheet

Result

- Corrected misconception- no change in refusal
- No change
- Increase concerns about autism from vaccines

WHAT CHANGES PARENTS MINDS?

- Health Styles Survey 2009
 - 82% reported health care provider most trusted source of vaccine information
 - 79% reported vaccines were important
 - 79% vaccines were safe

TALKING TIPS

- The parent wants what is best for the child
- Understand this is an emotional issue
- Make sure you know which "fear" the parent has
- Don't assume scientific evidence is understood or very effective
- Understand the importance of anecdotes

TALKING TIPS

- Listen
- Take time
- Welcome questions
- Don't interrupt
- Don't be offended
- Don't be judgmental
- Be honest
- Correct misconceptions/Provide information
- Speak without using medical jargon
- Respect parental authority

TALKING TIPS

- Participatory vs. Presumptive Initiative
- Participatory
 - Are we going to do shots?
- Presumptive Initiative
 - We will do 3 shots today is that ok?
- Aggressive pursuit
 - Toll on providers

AUTISM

- MMR
 - Wakefield
 - National Vaccine Compensation Program Rulings
- Thimerosal
 - Danish Studies
 - Has been removed from vaccines since 2001
- 2004 IOM Study

TOO MANY SHOTS

- Average child exposed to 2000-6000 antigens daily
- 1990 Vaccine antigen load was 10,000
- Current total antigen exposure for TOTAL vaccines to age 2 is 315

CDC 89

ALTERNATE SCHEDULES

- Born out of concern about too many vaccines
- Popularized by Dr. Bob Sears book
- Based on misinformation
- No scientific evidence of a benefit

IOM CHILDHOOD IMMUNIZATION SCHEDULE AND SAFETY REPORT

- Report Brief, January 2013
 - "In this most comprehensive examination of the immunization schedule to date, the IOM committee uncovered no evidence of major safety concerns associated with adherence to the childhood immunization schedule, which should help to reassure a diverse group of stakeholders."
 - __ " Indeed, rather than exposing children to harm, following the complete childhood immunization schedule is strongly associated with reducing vaccine-preventable diseases."

ADOLESCENT IMMUNIZATIONS

Vaccine	Kansas	US average
Tdap	92.2%	84.6%
Meningococcal	55.9%	74%
HPV#1	42.7%	53.8%
HPV#2	32.8%	43.4%
HPV#3	25.1%	33.4%

MMWR, 2013 92

ADOLESCENT VACCINE REFUSAL

- National Immunization Survey 2008-2010
- Reasons parental refusal Tdap and Menactra
 - Not recommended
 - Not necessary
 - Lack of knowledge
 - Don't know

HPV HESITANCY

- Reasons parental refusal
 - Vaccine not needed
 - Lack of knowledge
 - Daughter not sexually active
 - Safety of vaccine

MMWR, 2013

PROVIDER RECOMMENDATION

	2008	2010
Tdap	46.9%	50.0%
Menactra	28.6%	35.8%
HPV	46.8%	52.4%

PERCEIVED PROVIDER BARRIERS

- Concerns about financing issues
- Concerns about parental attitudes
- Logistical difficulties
- Safety of HPV vaccine
- Uncertainty of the need

OTHER FACTORS

- Infrequent preventative care visits
- School entry requirements

- 2% of children
- Not likely to change parental decision
- Provider decision
 - "Fire" the patient and family
 - Continue to see them and continue discussion

- KAAP Immunization Survey
- Percent ask patients to leave practice
 - Refuse all immunizations-16%
 - Refuse some immunizations- 3%

- Reasons to "fire" patient
 - Protection of other patients
 - Parent- provider trust concerns
 - Standard of Care
 - Documentation
- AAP, AAFP, AMA positions

SUMMARY

- Vaccine refusal and hesitancy is a growing problem
- Poses a public health problem
- Poses individual health problem
- Can result in significant financial burden
- Providers caught in the middle

IOM CHILDHOOD IMMUNIZATION SCHEDULE AND SAFETY REPORT

- "The committee identified a need for further study of parental attitudes and concerns about immunization. Based on the committee's review of the literature and public testimony, the committee strongly endorses research to understand parents' knowledge, beliefs, and concerns about vaccines and vaccinepreventable diseases, which is a key component of the 2010 National Vaccine Plan."
- "all health care providers who immunize children should receive training in communication with the goal of improving providerparent communication of immunization issues"

Resources

- Diekema DS. Responding to Parental Refusal of Immunization of Children. Pediatrics. May 2005; 115: 1428-1431
- Healy CM, Pickering LK. How to Communicate with Vaccine-Hesitant Parents. Pediatrics. May 2011;127:S127-S133
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- Freed GL, Clark SJ et al. Parental Vaccine Safety Concerns in 2009. Pediatrics. April 2010; 125(4):654-659